

**IN THE UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF TEXAS
WACO DIVISION**

Halliburton Company, Halliburton US
Technologies, Inc., Halliburton Group
Technologies, Inc.,

Plaintiffs,

v.

U.S. Well Services, LLC,

Defendant.

Case No. 6:21-cv-367-ADA

JURY TRIAL DEMANDED

**USWS'S MOTION FOR JUDGMENT AS A MATTER OF LAW
OF NO INFRINGEMENT, WILLFUL INFRINGEMENT, AND
NO DAMAGES AS TO U.S. PATENT NOS. 7,574,325; 9,435,333; AND RE47,695**

TABLE OF CONTENTS

	Page
I. INTRODUCTION.....	1
II. LEGAL STANDARD	2
III. ARGUMENT.....	2
A. Halliburton fails to prove infringement of the '325 Patent.....	3
B. Halliburton failed to prove infringement of the '333 Patent.	5
C. Halliburton failed to prove infringement of the '695 Patent	7
D. Halliburton has failed to prove pre- or post-suit willful infringement for the '333 Patent, '325 Patent, and '695 Patent	9
E. There is no legally sufficient evidence to support any damages.	11
IV. CONCLUSION	16

TABLE OF AUTHORITIES

Cases	Page(s)
<i>Anthony v. Chevron USA, Inc.</i> , 284 F.3d 578, 583–84 (5th Cir. 2002)	2
<i>Apple Inc. v. Motorola, Inc.</i> , 757 F.3d 1286 (Fed. Cir. 2014).....	11
<i>Applied Med. Res. Corp. v. U.S. Surgical Corp.</i> , 435 F.3d 1356 (Fed. Cir. 2006).....	12
<i>BASF Plant Sci., LP v. Commonwealth Sci. & Indus. Rsch. Org.</i> , 28 F.4th 1247, 1274 (Fed. Cir. 2022)	11
<i>Bayer Healthcare LLC v. Baxalta Inc.</i> , 989 F.3d 964, 988 (Fed. Cir. 2021).....	11
<i>Brigham & Women's Hosp., Inc. v. Perrigo Co.</i> , 761 F. App'x 995 (Fed. Cir. 2019)	3
<i>Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp.</i> , 509 U.S. 209 (1993).....	2
<i>Cassidian Communs., Inc. v. MicroData GIS, Inc.</i> , No. 2:12-cv-00162-JRG, 2013 WL 11322510 (E.D. Tex. Dec. 3, 2013).....	13
<i>Devex Corp. v. Gen. Motors Corp.</i> , 667 F.2d 347 (3d Cir. 1981).....	11
<i>Dynacore Holdings Corp. v. U.S. Philips Corp.</i> , 363 F.3d 1263 (Fed. Cir. 2004).....	4
<i>Eko Brands, LLC v. Adrian Rivera Maynez Enters., Inc.</i> , 946 F.3d 1367, 1378 (Fed. Cir. 2020).....	9
<i>E-Pass Techs., Inc. v. 3Com Corp.</i> , 473 F.3d 1213, 1222 (Fed. Cir. 2007).....	7
<i>Ericsson, Inc. v. D-Link Sys.</i> , 773 F.3d 1201 (Fed. Cir. 2014).....	13
<i>Evans v. Ford Motor Co.</i> , 484 F.3d 329 (5th Cir. 2007)	2
<i>Finjan, Inc. v. Juniper Networks, Inc.</i> , No. C 17-05659 WHA, 2018 WL 905909 (N.D. Cal. Feb. 14, 2018).....	10

<i>Guile v. United Sates</i> , 422 F.3d 221 (5th Cir. 2005)	2
<i>Gustofson, Inc. v. Intersys. Indus. Prods., Inc.</i> , 897 F.2d 508 (Fed. Cir. 1990).....	11
<i>Ironburg Inventions Ltd. v. Valve Corp.</i> , 64 F.4th 1274, 1296 (Fed. Cir. 2023)	9
<i>Jiaxing Super Lighting Elec. Appliance Co. v. CH Lighting Tech. Co.</i> , No. 6:20-CV-00018-ADA, 2023 WL 2415281 (W.D. Tex. Mar. 8, 2023) (Albright, J.).....	9
<i>LaserDynamics, Inc. v. Quanta Comput., Inc.</i> , 694 F.3d 51 (Fed. Cir. 2012).....	12
<i>Lucent Techs., Inc. v. Gateway, Inc.</i> , 580 F.3d 1301 (Fed. Cir. 2009).....	2, 4, 11
<i>Mas-Hamilton Grp. v. LaGard, Inc.</i> , 156 F.3d 1206, 1211 (Fed. Cir. 1998).....	3
<i>Mirror Worlds, LLC v. Apple Inc.</i> , 692 F.3d 1351 (Fed. Cir. 2012).....	3
<i>Mirror Worlds, LLC v. Apple, Inc.</i> , 784 F. Supp. 2d 703 (E.D. Tex. 2011), <i>aff'd</i> , 692 F.3d 1351 (Fed. Cir. 2012)	16
<i>Philp v. Nock</i> , 84 U.S. 460, 462 (1873).....	11
<i>Polanco v. City of Austin</i> , 78 F.3d 968 (5th Cir. 1996)	2, 14
<i>Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.</i> , 711 F.3d 1348 (Fed. Cir. 2013).....	7
<i>Promega Corp. v. Life Techs. Corp.</i> , 875 F.3d 651 (Fed. Cir. 2017).....	11
<i>Reeves v. Sanderson Plumbing Prods., Inc.</i> , 530 U.S. 133, 150–51 (2000).....	2
<i>ResQNet.com, Inc. v. Lansa, Inc.</i> , 594 F.3d 860 (Fed. Cir. 2010).....	13
<i>Riles v. Shell Expl. & Prod. Co.</i> , 298 F.3d 1302 (Fed. Cir. 2002).....	16

<i>RSA Protective Techs., LLC v. Delta Sci. Corp.</i> , No. LA CV19-06024 JAK (PLAx), 2021 WL 4978462 (C.D. Cal. Oct. 20, 2021)	12, 13
<i>SRI Int’l, Inc. v. Cisco Sys., Inc.</i> , 14 F.4th 1323, 1330 (Fed. Cir. 2021)	9
<i>TecSec, Inc. v. Adobe Inc.</i> , 978 F.3d 1278 (Fed. Cir. 2020).....	11, 14, 15
<i>TQ Delta, LLC v. CISCO Sys., Inc.</i> , 942 F.3d 1352 (Fed. Cir. 2019).....	4
<i>Transclean Corp. v. Bridgewood Servs., Inc.</i> , 290 F.3d 1364, 1376 (Fed. Cir. 2002).....	11
<i>Travis v. Bd. of Regents of the Univ. of Tex. Sys.</i> , 122 F.3d 259 (5th Cir. 1997)	2
<i>Vectura Ltd. v. Glaxosmithkline LLC</i> , No. CV 16-638-RGA, 2019 WL 1352767 (D. Del. Mar. 26, 2019).....	13
Statutes	
35 U.S.C. § 271	2, 4
Other Authorities	
Fed. R. Civ. P. 50(a)(1).....	2

I. INTRODUCTION

USWS is entitled to judgment as a matter of law that USWS does not infringe Halliburton's asserted patents, or at minimum, that Halliburton has not offered sufficient evidence to demonstrate willful infringement or for a jury to calculate a reasonable royalty for infringement.

Halliburton failed to present sufficient evidence that USWS ever practiced every step of each claimed method together. As to the '333 Patent, Halliburton provided no evidence demonstrating any instance in which USWS pumped fluid (1) through a stainless steel fluid end fatigue limit of 75ksi or (2) with a salt concentration of about 4% or greater through a fluid end meeting the claimed specifications. With respect to the '325 Patent Halliburton provided no evidence demonstrating any instance in which USWS practiced Claim 18. And regarding the '695 Patent, Halliburton provided no evidence demonstrating the transfer pump, the down hole pump, or a combination thereof is powered by natural gas from a field on which the subterranean operation is being performed.

Although a judgment as a matter of law of no infringement should be entered for USWS on all the asserted patents, if the case is allowed to proceed to the jury on liability, judgment as a matter of law of no damages on the '325 Patent, '333 Patent, and '695 Patent should be granted now. Halliburton did not present reliable expert testimony apportioning the incremental value of the claimed invention in the '325 Patent. Halliburton failed to present evidence tying damages to the alleged infringement of the '333 Patent and did not present reliable expert testimony on the hypothetical negotiation resulting in an agreed reasonable royalty. Finally, Halliburton did not present sufficient evidence apportioning damages related to the '695 patent based on noninfringing alternatives.

II. LEGAL STANDARD

Judgment as a matter of law is appropriate “[i]f a party has been fully heard on an issue during a jury trial and the court finds that a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue.” Fed. R. Civ. P. 50(a)(1). “A court should grant a Rule 50(a) motion not only when the non-movant presents no evidence, but also when there is not a sufficient conflict in substantial evidence to create a jury question.” *Travis v. Bd. of Regents of the Univ. of Tex. Sys.*, 122 F.3d 259, 263 (5th Cir. 1997) (citation omitted).

There is “substantial evidence” supporting a verdict only if “the evidence [is of] such quality that reasonable and fair-minded persons would reach the same conclusion.” *Polanco v. City of Austin*, 78 F.3d 968, 974 (5th Cir. 1996). “[T]he court should give credence to the evidence favoring the nonmovant as well as that evidence supporting the moving party that is uncontradicted and unimpeached” *Evans v. Ford Motor Co.*, 484 F.3d 329, 334 (5th Cir. 2007) (quoting *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150–51 (2000)). “When an expert opinion is not supported by sufficient facts to validate it in the eyes of the law, or when indisputable record facts contradict or otherwise render the opinion unreasonable, it cannot support a jury’s verdict.” *Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 242 (1993). And any inference that “would be ‘mere speculation and conjecture’ . . . is not sufficient to support a jury verdict.” *See Guile v. United Sates*, 422 F.3d 221, 226 (5th Cir. 2005) (quoting *Anthony v. Chevron USA, Inc.*, 284 F.3d 578, 583–84 (5th Cir. 2002)).

III. ARGUMENT

Direct infringement of a method claim requires USWS to “practice[] all steps of the claimed method.” *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1317 (Fed. Cir. 2009); 35 U.S.C. § 271. “If even one limitation is missing or not met as claimed, there is no literal

infringement.” *Brigham & Women’s Hosp., Inc. v. Perrigo Co.*, 761 F. App’x 995, 1003 (Fed. Cir. 2019) (citing *Mas-Hamilton Grp. v. LaGard, Inc.*, 156 F.3d 1206, 1211 (Fed. Cir. 1998) (affirming JMOL on noninfringement)).

A. Halliburton fails to prove infringement of the ’325 Patent.

Halliburton has no evidence of direct infringement of the ’325 Patent. Halliburton’s infringement claim cannot reach the jury on circumstantial evidence alone showing only that USWS was *capable* of infringing. *See Mirror Worlds, LLC v. Apple Inc.*, 692 F.3d 1351, 1359 (Fed. Cir. 2012) (affirming JMOL of noninfringement where there was no evidence that any of defendants’ employees actually performed the claimed method). And that is exactly what Halliburton has tried to do.

At no point during trial did Halliburton prove that USWS accused software, IPC, MPC, and FracMD,¹ switches from one mode of operation to another mode of operation, as required by the fourth element of the claim. Dr. Cardi admitted that he could not identify one instance where USWS performs Claim 18:

Q. Okay. And after reviewing all those documents and reading the dozens of hours of depositions and reviewing all the special questions that U.S. Well had to answer in writing your 200-page report, the one thing I didn’t see, sir, and you correct me if I’m wrong, is a single time or date where you allege U.S. Well ever performed the method in Claim 18[a]; is that fair -- I’m sorry -- in Claim 18?

A. I don’t think I offered a date or time.

Q. Right. You don’t point to a single time, sir, where U.S. Wells performed that method, fair?

A. I’ve cited, I believe, lists of catches that have dates associated with them.

Trial Tr., Day 2, 659:17-660:7.

¹ Halliburton also fails to provide sufficient evidence that AccuFrac, which was originally accused, infringed the ’325 Patent. But Halliburton did not present argument relating to AccuFrac and confirmed during the cross examination of Ms. Kindler that AccuFrac was no longer an accused instrumentality.

When asked directly about whether the “catches” perform Claim 18, Dr. Cardi admitted this was not a part of his noninfringement opinion:

Q. You didn’t undertake an analysis to review the catches and actually opine that what U.S. Well was actually doing infringes Claim 18, fair?

A. I didn’t explicitly link the catches to my analysis of Claim 18.

Trial Tr., Day 2, 662:11-15

Q. And all of your testimony a moment ago about whether any of the catches you were shown are infringing Claim 18, you didn’t do any of that in your report, did you, sir?

A. I didn’t specifically analyze the catches against Claim 18 in my report. You are correct.

Trial Tr., Day 2, 676:11-677:5.

Possible infringement is not infringement. USWS has to practice every step of the method, or there is no infringement. *Lucent*, 580 F.3d at 1317; 35 U.S.C. § 271. Therefore, conclusory expert testimony of infringement does not qualify as substantial evidence. *TQ Delta, LLC v. CISCO Sys., Inc.*, 942 F.3d 1352, 1358 (Fed. Cir. 2019) (collecting cases); *see also Dynacore Holdings Corp. v. U.S. Philips Corp.*, 363 F.3d 1263, 1278 (Fed. Cir. 2004) (“It is well settled that an expert’s unsupported conclusion on the ultimate issue of infringement is insufficient to raise a genuine issue of material fact . . .”). Given Dr. Cardi’s admissions that USWS does not practice any portion of the claim, Halliburton has not proved that USWS’s accused products, MPC and IPC, infringe the ‘325 Patent.

In addition, even if Halliburton did have sufficient proof that there was practicing of the features accused of infringement in IPC, MPC, and FracMD, there was not sufficient evidence for a jury to find that those accused features satisfy the element of switching from a first mode of operation to a second mode of operation, and not sufficient evidence for a jury to find that those accused features included a method of controlling a complex computer controller as opposed to merely controlling the nodes themselves (i.e., the pumps).

B. Halliburton failed to prove infringement of the '333 Patent.

Halliburton failed to sufficiently prove that USWS's stainless steel fluid ends have a fatigue limit of at least 75ksi and comprised of 5% or more chromium. Mr. Robinson testified that USWS primarily used fluid ends manufactured by Gardner Denver. Trial Tr., Day 1, 264:11-14. But Dr. Eiselstein did not test Gardner Denver fluid ends. Trial Tr., Day 2, 131:5-6. And Dr. Eiselstein admitted that since Gardner Denver fluid ends are less than 75 ksi, there would be no infringement. Trial Tr., Day 2, 129:11-17.

Halliburton also did not provide sufficient evidence that any USWS's accused fleets pumped fluid with a salt concentration of 4% by weight. Halliburton did not sample USWS's frac fluid and provided no evidence as to what percentage of salt USWS pumps through its fluid ends. Halliburton's expert admitted that he did not analyze—or even ask for—a single sample of frac fluid to determine the salt content that USWS actually used in a frac job. Trial Tr., Day 2, 144:16-145:2; 514:15-515:6. The three water samples he did analyze were **not** USWS's fracturing fluid. Trial Tr., Day 2, 521:20-24. And Dr. Eiselstein outright ignored four USWS freshwater samples that USWS made available to him as part of the lawsuit. Trial Tr., Day 2, 505:23-507.4.

Dr. Eiselstein admitted that the three water samples he did consider do not account for water blending. Trial Tr., Day 2, 515:7-22. He testified that he did not know whether the three water samples he analyzed were blended. Trial Tr., Day 2, 526:5-8 (Lasso Produced Pit); 526:21-25 (Fry Gamble); 527:11-14 (Bakerstown). If the three samples analyzed had been blended, Dr. Eiselstein acknowledges that the salt concentration would be lower. Trial Tr., Day 2, 526:9-20. And because of these facts, Dr. Eiselstein ultimately admitted that he did not know the final salt percentages of the aqueous-based fluid pumped through USWS's fluid ends:

Q. Okay. And what that means is that as to all of these percentages, since we don't -- since you don't know the blend percentage of fresh water, ultimately if we say this is the final salt percentage --

A. Yes.

Q. -- we don't know for Lasso, right?

A. Don't know from direct measurements. No.

Q. We don't know for Fry Gamble, right?

A. That is correct. We don't know from direct measurements.

Q. And we don't know for Bakerstown Road?

A. Correct.

Q. Right?

A. Correct.

Trial Tr., Day 2, 527:15-528:12. He further agreed that if produced water containing 10% salt was blended by ratios of 30% produced water to 70% freshwater, the salt percentage would be diluted and under 4%, which would be not infringing. Trial Tr., Day 2, 531:6-25.

Testimony from USWS employees that USWS regularly included freshwater in fracturing fluid as part of water *blend* shows only that USWS did something that *could* be done in an infringing way. USWS employee Matt Helmick testified that USWS regularly pumps produced water as part of their "water blend." Trial Tr., Day 1, 318:4-318:8. Lon Robinson further acknowledged that "U.S. Well typically uses a blend of produced water and fresh water." Trial Tr., Day 1, 269:17-269:21. Mr. Helmick further noted that USWS does not actively monitor salt concentration but that he had only seen volumes of less than 1% salt. Trial Tr., Day 1, 319:9-319:19.

In addition, there was undisputed testimony that the typical blend ratio that USWS uses is 75-85% freshwater with 15-25% produced water. As such, even if the produced water samples that Dr. Eiselstein analyzed were used in fracking, the testimony is that they would have been blended, and at this ratio, it just as likely that the fluid would have been below 4% as above, and as such, Halliburton has not proven its burden. Finally, there is no evidence that the produced water samples were actually used to be pumped through a stainless steel fluid end, and therefore, the produced water samples analyzed are irrelevant.

The Federal Circuit has “consistently require[d] that the record demonstrate something more than speculation that infringing activity has occurred.” *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, 711 F.3d 1348, 1376 (Fed. Cir. 2013) (citing *E-Pass Techs., Inc. v. 3Com Corp.*, 473 F.3d 1213, 1222 (Fed. Cir. 2007)). The Court should grant USWS’s judgment as a matter of law for infringement of the ’333 Patent.

C. Halliburton failed to prove infringement of the ’695 Patent

Halliburton failed to prove infringement of Claim 56 of the ’695 Patent—that USWS’s natural gas is obtained from a “field on which the subterranean operation is being performed.” JTX-0004. Halliburton’s expert, Dr. Hilbert, did not identify *any single instance* in which USWS ever powered pumps with natural gas from a field on which the subterranean operation is being performed. Dr. Hilbert testified that anytime USWS uses natural gas, it infringes the ’695 Patent. Trial Tr., Day 2, 407:1-407:8. But the use of natural gas alone does not infringe the claim language. Trial Tr., Day 2, 398:24-399:6. The claim requires that the natural gas be “obtained from a field on which the subterranean operation is being performed,” which Dr. Hilbert acknowledged. Trial Tr., Day 2, 409:11-409:16.

There is no evidence that USWS’s gas is obtained from the field on which the subterranean operation is being performed. The word “field” has been construed by the Court as “an area on the same individual geological structural feature and/or stratigraphic condition.” Dkt. 432. Halliburton’s witness admitted that the Permian Basin has multiple stratigraphic horizontal geological formations under the earth:

Q. Okay. Do you agree with me that “strata” means “layers”?

A. Yes. That’s -- yes. I do.

* * *

Q. . . And you know that there are different geological structures within the Permian Basin, right?

A. It’s complex geometry. Yes. Or geology. Excuse me. Yes.

Q. And some of those different geological formations have names like the Lamar,

the Delaware, the Wolfcamp, Wolfberry, the Spraberry. Those are -- those are things that we see there, right?

A. Yes. I see those on the screen.

Q. Those are different strata?

A. Rock types and formations as I discussed, yes.

Trial Tr., Day 2, 416:21-417:2;419:2-14.

According to Robinson, not all gas on a USWS well site comes from the same geologic formation. Trial Tr., Day 1, 261:14-16. And USWS does not track what geologic structure or stratigraphic condition that its natural gas comes from. Trial Tr., Day 1, 262:6-262:14. The customer supplies USWS's gas. Trial Tr., Day 1, 258:15-23. Mr. Robinson further testified that there can be two wells right next to each other—only a few hundred yards away—that can obtain natural gas from different fields—or geographic formations. Trial Tr., Day 1, 262:22-263:20.

Halliburton's evidence about "field gas" is unavailing, because the term **"field gas"** **appears nowhere in the claim or in the Court's construction of "field."** Dr. Hilbert acknowledges this:

Q. Can we agree that the patent claim that we just talked about, Claim 56, that those two words, "field gas," are not in the claim?

A. Yes. Field and gas do not appear together in the claim.

Trial Tr., Day 3, 410:15-410:19. And the Claim 56 does not require simply that natural gas come from a field generally. Trial Tr., Day 3, 413:2-413:4. Dr. Hilbert admitted that field gas has to come from a defined place. Trial Tr., Day 3, 413:21-413:25. According to USWS employees Mr. Robinson and Matt Helmick, the term "field gas" means customer-supplied gas. Trial Tr., Day 1, 214:13-25; 258:15-23. Mr. Robinson specifically noted that he does **not** understand "field gas" to mean the Court's construed definition. Trial Tr., Day 1, 261:7-261:13.

Halliburton presented no evidence that USWS ever performed each of the claimed steps in combination. Therefore, the Court should grant this judgment as a matter of law. *Lucent Techns.*,

543 F.3d at 723 (Fed. Cir. 2008) (cleaned up) (affirming JMOL of noninfringement on method claims where the plaintiff failed to identity any specific instances of direct infringement or show, with more than speculative, circumstantial evidence, that the allegedly infringing software had ever actually run).

D. Halliburton has failed to prove pre- or post-suit willful infringement for the '333 Patent, '325 Patent, and '695 Patent

“Deliberate and intentional infringement” is the touchstone for willful infringement. *Eko Brands, LLC v. Adrian Rivera Maynez Enters., Inc.*, 946 F.3d 1367, 1378 (Fed. Cir. 2020) (citing *Halo*, 579 U.S. at 105). To prevail on a claim of willful infringement, Halliburton is “required to prove, by a preponderance of the evidence, that [USWS] knew of the [] patent and then engaged in ‘deliberate or intentional infringement.’” *Ironburg Inventions Ltd. v. Valve Corp.*, 64 F.4th 1274, 1296 (Fed. Cir. 2023) (quoting *SRI Int’l, Inc. v. Cisco Sys., Inc.*, 14 F.4th 1323, 1330 (Fed. Cir. 2021). In other words, as distilled further by this Court, Halliburton had to prove that USWS “(1) knew of the patent-in-suit; (2) after acquiring that knowledge, it infringed the patent; and (3) in doing so, it knew, or should have known, that its conduct amounted to infringement of the patent.” *Jiaxing Super Lighting Elec. Appliance Co. v. CH Lighting Tech. Co.*, No. 6:20-CV-00018-ADA, 2023 WL 2415281, at *9 (W.D. Tex. Mar. 8, 2023) (Albright, J.).

There is not sufficient evidence to show pre-suit willful infringement. There was no notice of pre-suit infringement, which Halliburton’s counsel conceded at the pretrial conference. July 26, 2023 Pretrial Conf. Tr. at 106:4–6. And Mr. Robinson testified that he did not have knowledge of the patents until after the lawsuit was filed. Trial Tr., Day 1, 212:12-212:14. He only reviewed the patents at the advice of USWS’s lawyers. Trial Tr., Day 1, 212:15-212:17. Willful infringement cannot be shown without knowledge of the patents. USWS’s defense of the lawsuit is not enough to satisfy willful infringement. *Eko Brands, LLC v. Adrian Rivera Maynez Enters., Inc.*, 946 F.3d

1367, 1379 (Fed. Cir. 2020) (affirming jury instruction on willful infringement allowing the jury to consider that the alleged infringer “reasonably believed that it did not infringe or the patent was invalid”).

Mr. Robinson’s mere presence at a 2005 Halliburton meeting does not establish knowledge of the patents, because the meeting was far before any of the Patents were filed or issued. Mr. Robinson testified that he was not at Halliburton when the 695 Patent was issued in 2019. Trial Tr., Day 1, 274:13-274:19; *see also* JTX-0002; JTX-0003; JTX-0004. *Finjan, Inc. v. Juniper Networks, Inc.*, No. C 17-05659 WHA, 2018 WL 905909, at *2–4 (N.D. Cal. Feb. 14, 2018) (dismissing complaint because plaintiff failed to allege that defendant had pre-suit knowledge of the *patents-in-suit*, as opposed to plaintiff’s *patent portfolio* or a specific *non-asserted* patent).

There is also not sufficient evidence of post-suit infringement. Shawn Stasiuk testified that USWS’s e-fleets, which are accused products, had been commercialized since 2014, eight years prior to Halliburton filing its counterclaims against USWS on May 16, 2022. Dkt. 99; Trial Tr. Day 1, 98:17-98:17. Halting USWS’s operations based on Halliburton’s assertions of patent infringement, when USWS reasonably believed it was not infringing for many years, is not required under the law. *UroPep*, 2017 WL 2190055 at *2 (When drug company had been marketing drug for three years before filing of the patent infringement lawsuit, “it was not surprising that Lilly would not have lightly concluded that its entire [] marketing program [on the allegedly infringing product] was at risk because of the [] patent.”).

This Court should grant this Rule 50(a) motion because Halliburton has failed show any conduct by USWS to establish deliberate and intentional infringement. *See UroPep GbR*, 2017 WL 2190055, at *2 (granting pre-verdict Rule 50(a) JMOL on willful infringement because “the circumstantial evidence . . . was not strong enough to justify submitting the issue of willfulness to

the jury” and “the conduct was not sufficiently extreme to qualify as ‘egregious’ under the Supreme Court’s articulation.”); *Bayer Healthcare LLC v. Baxalta Inc.*, 989 F.3d 964, 988 (Fed. Cir. 2021) (affirming trial court’s directed verdict on willfulness because the “record [was] insufficient to establish that [defendant’s] conduct rose to the level of wanton, malicious, and bad-faith behavior required for willful infringement.” (cleaned up)); *BASF Plant Sci., LP v. Commonwealth Sci. & Indus. Rsch. Org.*, 28 F.4th 1247, 1274 (Fed. Cir. 2022) (affirming directed verdict because two facts without more only established “[k]nowledge of the asserted patent and evidence of infringement—which is necessary, but not sufficient, for a finding of willfulness.” (cleaned up)).

E. There is no legally sufficient evidence to support any damages.

Halliburton “had the burden of proving the amount of reasonable royalty damages it is entitled to recover.” *Transclean Corp. v. Bridgewood Servs., Inc.*, 290 F.3d 1364, 1376 (Fed. Cir. 2002); *see also Promega Corp. v. Life Techs. Corp.*, 875 F.3d 651, 660 (Fed. Cir. 2017) (quoting *Philp v. Nock*, 84 U.S. 460, 462 (1873)) (“Damages must not be left to conjecture by the jury. They must be proved, and not guessed at.” (cleaned up)).

Section 284 “does not require an award of damages if none are proven that adequately tie a dollar amount to the infringing acts.” *TecSec, Inc. v. Adobe Inc.*, 978 F.3d 1278, 1291 (Fed. Cir. 2020); *see also Devex Corp. v. Gen. Motors Corp.*, 667 F.2d 347, 363 (3d Cir. 1981); *Promega*, 875 F.3d at 666. “In the absence of any evidence as to what would constitute a reasonable royalty in a given case, a fact finder would have no means of arriving at a reasonable royalty, and none could be awarded.” *Id.* at 361; *see also Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1328 (Fed. Cir. 2014) (“[I]n a case completely lacking any evidence on which to base a damages award, the record may well support a zero royalty award.”); *Gustofson, Inc. v. Intersys. Indus. Prods., Inc.*, 897 F.2d 508, 509–10 (Fed. Cir. 1990) (finding “no reversible error in the district court’s . . . awarding no damages to [the plaintiff] because none were proven”).

1. Halliburton failed to show damages for the '333 Patent.

Halliburton did not prove that it is entitled to reasonable royalty damages, because it did not use the date of first alleged infringement for the hypothetical negotiation. According to the Federal Circuit, the “correct determination of the hypothetical negotiation date is essential for properly assessing damages.” *LaserDynamics, Inc. v. Quanta Comput., Inc.*, 694 F.3d 51, 75 (Fed. Cir. 2012). “In general, the hypothetical negotiation date is the date that the alleged infringement began.” *Id.*; *Applied Med. Res. Corp. v. U.S. Surgical Corp.*, 435 F.3d 1356, 1363–64 (Fed. Cir. 2006) (“[T]he hypothetical negotiation relates to the date of first infringement.”). The date of first infringement is therefore critical to a reasonable royalty calculation and using “the wrong hypothetical negotiation date is not harmless error.” *RSA Protective Techs., LLC v. Delta Sci. Corp.*, No. LA CV19-06024 JAK (PLAx), 2021 WL 4978462, at *12 (C.D. Cal. Oct. 20, 2021) (citing *LaserDynamics*, 694 F.3d at 76).

Here, Halliburton relies on the wrong hypothetical negotiation date and did not consider the date of the first alleged infringing activity of the '333 Patent. Ms. Kindler stated that the hypothetical negotiation date would have occurred in September 2016. Trial Tr., Day 2, 691:9-11, 22-25. However, on cross-examination Ms. Kindler conceded that she had no opinion as to when USWS first allegedly practiced Claim 1:

Q. Okay. And so there's -- you have no opinion on -- on when, if ever, U.S. Well Services first used the method?

A. So I'm relying on the technical experts for that type of information that's an infringement question.

Q. So the answer to my question is no?

A. That's outside of my -- the scope of my assignment. Yes.

Q. Okay. So, Ms. Kindler, the answer to my question is no?

A. Yes. I mean, I think I'm answering no.

Trial Tr., Day 3, 764:23–765:9. Multiple courts have held that such failure to account for the date of first infringement warrants excluding the damages theory entirely. *LaserDynamics*, 694

F.3d at 75 (reversing and remanding for a new trial on damages where the district court relied on the wrong hypothetical negotiation date); *RSA Protective*, 2021 WL 4978462, at *13 (excluding expert testimony that uses “the wrong hypothetical negotiation dates”); *Vectura Ltd. v. Glaxosmithkline LLC*, No. CV 16-638-RGA, 2019 WL 1352767, at *4 (D. Del. Mar. 26, 2019) (“As the date of the hypothetical negotiation is July 25, 2016 as a matter of law, [the expert’s] opinions to the contrary will be excluded.”); *Cassidian Communs., Inc. v. MicroData GIS, Inc.*, No. 2:12-cv-00162-JRG, 2013 WL 11322510, at *2 (E.D. Tex. Dec. 3, 2013) (excluding “fatally flawed” opinion “that [] calculates reasonable royalty based on an incorrect hypothetical negotiation date”). Accordingly, Ms. Kindler’s damages opinion is fatally flawed, and Halliburton has failed to prove damages as a matter of law.

Halliburton improperly pursued a damages theory tied solely to USWS’s replacement of stainless steel fluid ends and not to the facts of this case. Trial Tr., Day 3, 761:25-762:12. Ms. Kindler agreed that she based her reasonably royalty calculation solely on her estimate “of the replacement cost savings from implementing stainless steel fluid ends,” failing to quantify additional cost savings. *Id.* But Federal Circuit precedent is clear that direct infringement of a method claim requires that someone practice every step of the method. *Ericsson, Inc. v. D-Link Sys.*, 773 F.3d 1201, 1219 (Fed. Cir. 2014) (“A method claim is directly infringed when someone practices every step of the patented method.”); *see also Lucent*, 580 F.3d at 1317. And such damages base must be “tailored to any alleged internal use of the claimed methods.” *ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860, 869 (Fed. Cir. 2010). Merely replacing a fluid end does not infringe Halliburton’s patent. Indeed, Dr. Eiselstein made clear that a fluid end in and of itself—even meeting all specifications set forth in the claim—does not infringe Claim 1. Trial Tr., Day 2, 534:9-534:15 (Q. “And every fluid end in existence, stainless steel fluid end

in existence can be used to pump frac fluid with less than four percent salt, right?” A. “Certainly.” Q. “And that of course would not infringe the ’333 [P]atent, would it?” A. “That is correct.”).

Ms. Kindler did not rely on any evidence from which the jury could determine that any fluid end was used to practice the patented method. Ms. Kindler conceded that she has not “relied on any documents or testimony showing how often any of the stainless steel fluid ends were used to pump fracturing fluids with salt concentrations above 4 percent by weight.” Day 3 Tr. Trans. 763:14-20. Indeed, she agreed that she did not cite “any documents or testimony showing that any of the fluid ends at issue in this case were ever used to pump fracturing fluids with salt concentration above 4 percent by weight.” Trial Tr., Day 3, 763:21-764:2. Therefore, Halliburton has failed to sufficiently prove damages for the ’333 Patent.

2. Halliburton failed to show damages for the ’325 Patent.

Halliburton failed to attribute a dollar amount to any alleged infringement of the ’325 Patent, because Ms. Kindler generally applied the adjusted royalty base to USWS’s general use of FracMD, which undisputedly includes non-infringing uses. Ms. Kindler has not “tie[d] a dollar amount to the infringing acts,” so Halliburton has not sufficiently proved that it is entitled to an award of damages. *TecSec*, 78 F.3d at 1291.

Ms. Kindler estimated a royalty on the assumption that USWS’s use of a monitoring software, FracMD, permitted USWS to reduce its overall customer credits for non-productive time (NPT) by 35%. Trial Tr., Day 3, 769:12-21. In reaching her opinion, Kindler relied on a statement from USWS’s website that “predictive maintenance . . . results in reduced downtime of 35 to 45 percent.” Trial Tr., Day 3, 731:1-11. Ms. Kindler opined that the reduce in downtime related to this general use of FracMD across USWS Fleets resulted in “[c]ost savings per operational year of \$400,000.” Trial Tr., Day 2, 735:16-18.

Ms. Kindler's conclusion is fatally flawed because of her reliance on Dr. Adam Cardi, who, at trial, admitted that his infringement analysis was limited to the use of FracMD on frac pumps:

Q. And there's a bunch of subcategories, but there's components on frac pumps, components on the blender and components on the ground iron; is that fair?

A. Yes.

Q. And you allege infringement based on the frac pumps, right?

A. Correct.

Q. You don't allege infringement based on the other components of FracMD, such as the blender or the ground iron; is that right?

A. I have not.

Trial Tr., Day 2, 605:12-23. In addition, Dr. Cardi admitted that he did not analyze the relative importance among FracMD's various features:

Q. You also didn't do any type of study or analysis as to the relative importance among all the features in FracMD; is that fair?

A. Which features specifically are you talking about?

Q. Well, we've talked about the FracMD's monitoring of frac pumps, blenders, ground iron, right? You didn't monitor -- you didn't analyze how important those features are comparatively, did you?

A. I did not.

Trial Tr., Day 2, 607:8-17. As Ms. Kindler admitted, she is reliant on Dr. Cardi for "technical question[s]" underlying her damages opinions regarding the '325 Patent, including what FracMD is, and what the benefits of FracMD are. Trial Tr., Day 3, 766:14-767:11.

When asked whether she lacked the information from Dr. Cardi's trial testimony when initially forming her opinions, Ms. Kindler disagreed, stating that she "had extensive conversations with [Dr. Cardi] about the importance of the ['325] patent to FracMD." Trial Tr., Day 3, 769:5-11. But Ms. Kindler's royalty estimate does not reflect the limitations of infringement contentions that Dr. Cardi admitted at trial. Accordingly, her damages opinion as to the '325 Patent do not "adequately tie a dollar amount to the infringing acts," and Halliburton has not sufficiently proved that it is entitled to damages for the '325 Patent. *See TecSec*, 978 F.3d at 1291.

3. Halliburton failed to show damages for the '695 Patent.

Halliburton has not provided sufficient proof that it is entitled to the damages it seeks, because Ms. Kindler failed to apportion the noninfringing use for the '695 Patent—compressed natural gas (CNG) and liquid natural gas (LNG). *Riles v. Shell Expl. & Prod. Co.*, 298 F.3d 1302, 1312 (Fed. Cir. 2002) (“The economic relationship between the patented method and non-infringing alternative methods, of necessity, would limit the hypothetical negotiation.”); *Mirror Worlds, LLC v. Apple, Inc.*, 784 F. Supp. 2d 703, 724–25 (E.D. Tex. 2011) (“Although a reasonable royalty analysis necessarily involves an element of approximation and uncertainty, the Court must ensure that the jury verdict is supported by sufficient evidence.” (cleaned up)), *aff'd*, 692 F.3d 1351 (Fed. Cir. 2012).

USWS’s expert, Dr. Gary Wooley, testified that “power sources other than natural gas,” including CNG and LNG, are noninfringing alternatives for the '695 Patent. Trial Tr., Day 3, 994:23-995:9. Mr. Helmick testified that USWS’s CleanFleets Generations 3 and 4 have used CNG to power the turbine generator. Trial Tr., Day 1, 317:10-13. Mr. Robinson further explained that customers decide where the natural gas comes from, and “they can use their gas or they can use CNG, which would have to be trucked in, or they could use LNG, which would also have to be trucked in.” Trial Tr., Day 1, 259:11-24. This testimony was never contradicted. And Ms. Kindler herself admitted that CNG and LNG can be brought to the location. But her damages analysis fails to apportion for CNG and LNG. So, Halliburton failed to prove it is entitled to damages

IV. CONCLUSION

Defendant respectfully requests that the Court grant its motion.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on August 24, 2023 the foregoing document was served on all counsel of record via the Court's electronic-filing system.

/s/ Thomas M. Melsheimer

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